Electronic Ignition System Installers Guide (EIS)

This lantern is equipped with an **Electronic Ignition System (EIS).**

The EIS allows the user to turn the gas flame on and off using a standard wall switch. The EIS will also re-lite the flame in the event the flame is blown out.

This system was tested to be operating properly before shipping.

You must read and follow these installation instructions.

This installation must be performed by a licensed professional.

1. First read and understand the GAS LANTERN INSTALLATION INSTRUCTIONS included with the lantern.
2. If the lantern is supplied with an optional hanging bracket, these instructions must also be incorporated into the installation process.
2. The EIS operates on a 110 Volt AC electrical current normally controlled by a standard wall switch.
3. The wiring coming from the igniter are ground and neutral sensitive and must be installed as shown in the diagram below or the EIS will not operate properly.

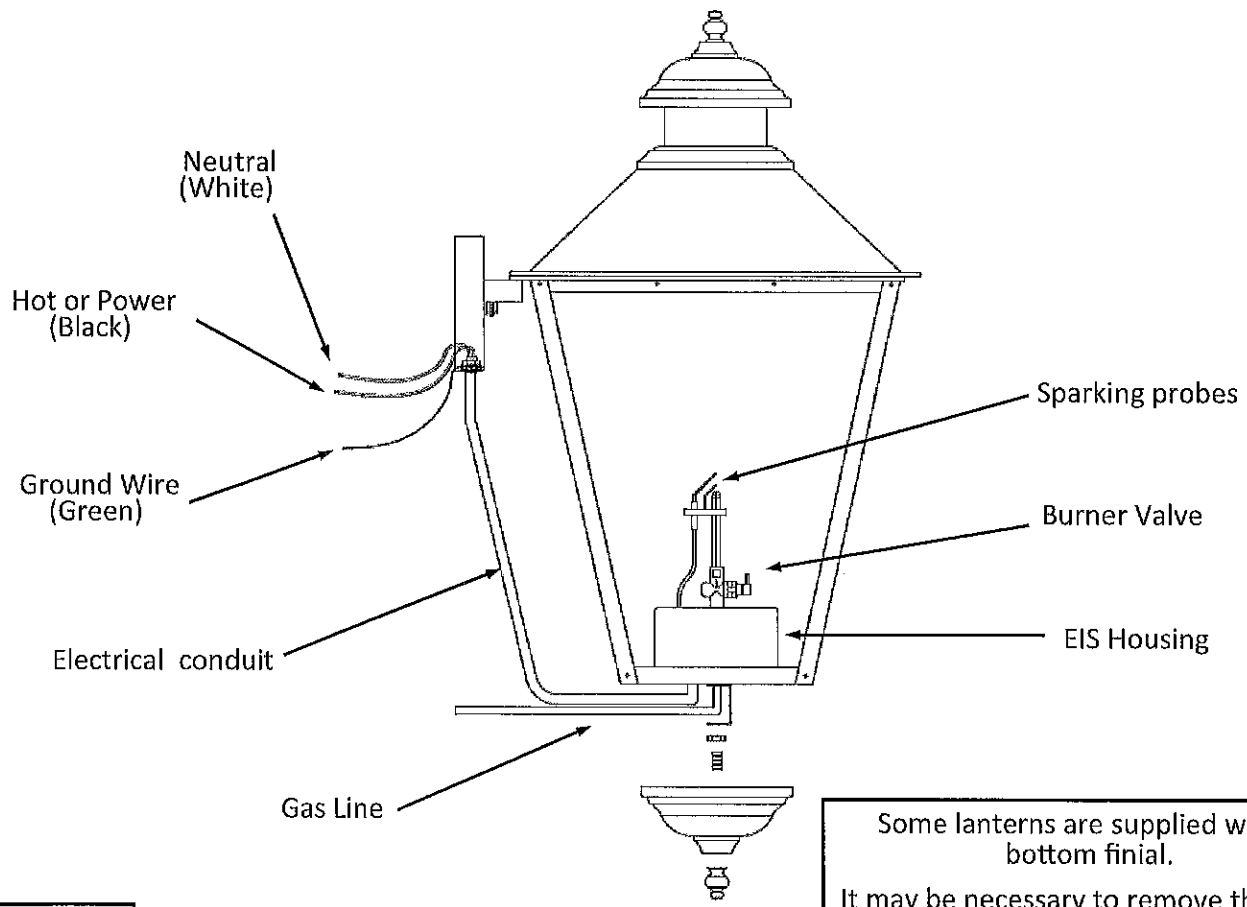


Figure 1

Some lanterns are supplied with a bottom finial.

It may be necessary to remove the finial to connect the gas line.

4. Remove the lantern from the packing. Open the lantern and remove any internal packing and installation information.
5. The electrical connections must be made prior to hanging the lantern in wall mount applications.
   The electrical connections can be made after a ceiling mounted lantern is hung.
6. Identify the three (3) wires coming from the EIS as follows:
   A. Green (Ground)
   B. White (Neutral)
   C. Black (Hot or Power)
7. Make the required connections as shown in figure 1 and install the lantern.
8. Connect and test the gas line using the GAS LANTERN INSTALLATION INSTRUCTIONS for guidance.

How It Works:

The EIS is designed to light the gas lantern flame using an electrical spark between two probes located on top of the gas burner tip. (See Figure 1) The power supply is normally controlled by a standard 110 volt wall mounted switch.

When the power is turned on, the EIS will go through a programed sequence to ignite the flame or turn off the gas supply.

When the power is turned on, this is what will happen.

You will hear a click and then you will hear and see several bright blue sparks between the two probes directly above the burner tip. One of two things will happen next.

A. The flame will ignite and stay lit until the power supply is turned off.

B. The flame will not ignite and the EIS will attempt to light the flame 3 times. You will hear and see the bright blue sparks above the burner tip attempting to light the flame. This will happen three (3) times. If the flame does not light, the EIS will shut down and turn off the gas supply.

The EIS can be re-set to repeat this sequence by turning the power supply (light switch) off and back on. When the power is turned back to the on position, the EIS will go through the same sequence of trying to light the flame three times. (See the trouble shooting guide on page 4 for additional information.)

When you use the EIS for the first time:

It may be necessary to make the EIS go through this cycle several times to allow the gas line to be purged of air before the flame will ignite. This is accomplished by turning the power off and on again after each lighting sequence.

If the flame is blown out:

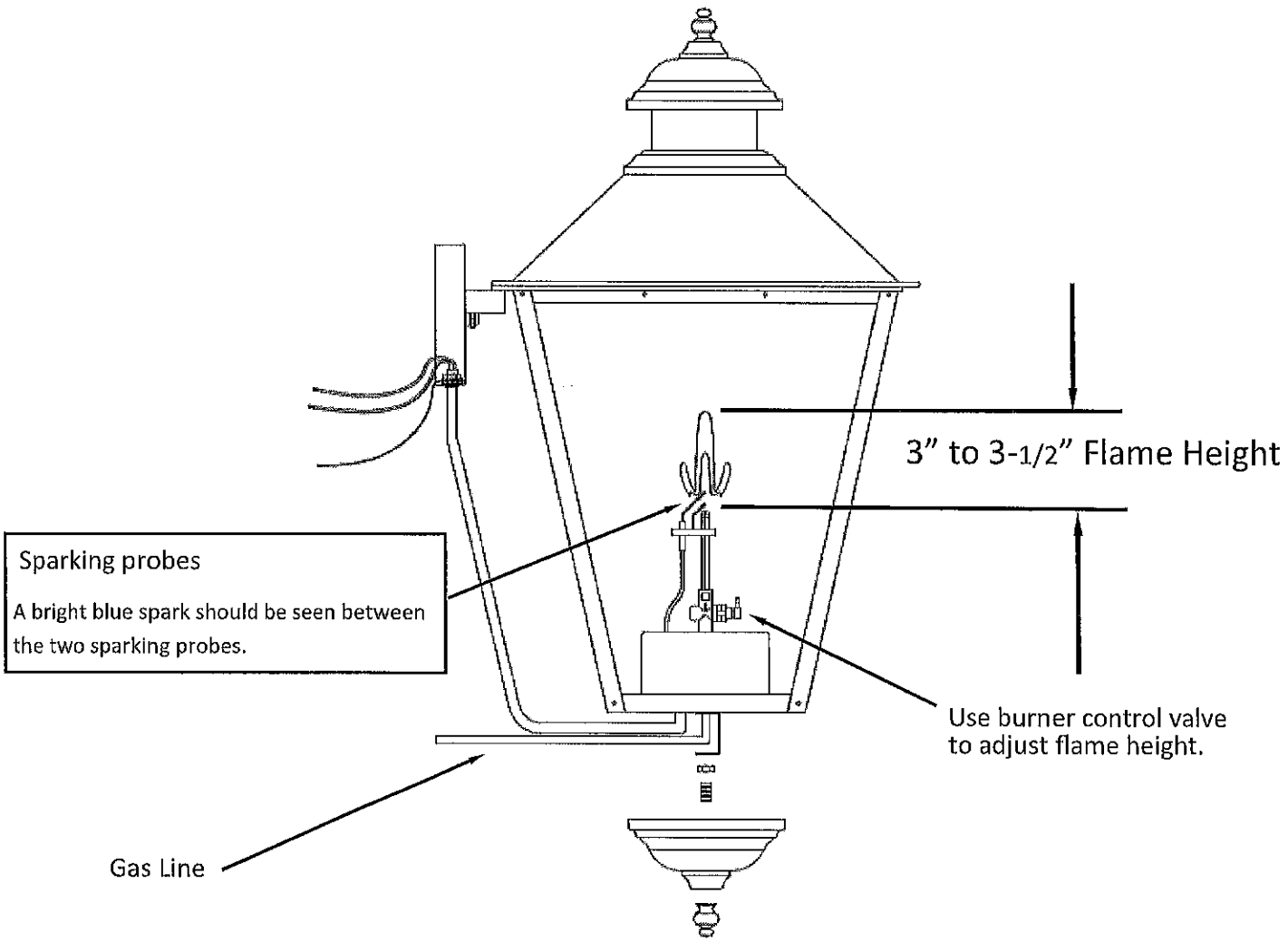
The EIS will attempt to re-lite the flame using the same sequence as when the power was turned on at the wall switch. If the flame does not ignite, the EIS will shut down and have to be reset by turning the power supply off and back on.

Start Up:

1. Turn on the gas supply and make sure the valve on the lantern is in the open position or the valve stem in the vertical position. (Figure 2)
2. Turn on the electrical power supplying power to the wall switch and turn on the wall switch.
3. When the flame is ignited, use the valve on top of the EIS Housing to adjust the flame size to between 3 and 3 1/2" in height. (Figure 2)

Testing:

Testing can be accomplished by turning the power off and back on and by blowing out the flame and making sure the EIS relights the flame.


3" to 3-1/2" Flame Height
Sparking probes
A bright blue spark should be seen between the two sparking probes.
Use burner control valve to adjust flame height.
Gas Line

Trouble Shooting Guide

Problem	Solution
Power is turned on to the EIS. No clicking sound or sparking.	Verify that 120 VAC is being supplied to the EIS when the wall switch is turned on. (Home Control System?)
A clicking sound is heard but no spark can be seen between the sparking probes.	Check the connection on the ground wire. Check the distance between the sparking probes. They should be approximately 1/8" apart.
A clicking sound is heard and a good spark is seen, but the flame is not igniting.	The sparking probes may have become out of adjustment during shipping. This can be corrected by loosening the set screw on the spark probe holder and adjusting the probes to approximately 1/4" above the burner tip. Tighten the set screw after adjustment.
The flame is igniting, after a few minutes, the flame will go out. The EIS will relight the flame and after a few minutes the EIS will repeat this sequence.	The wiring on the EIS is neutral sensitive. Reverse the neutral and power wire connections. Check the ground wire connection. The sparking probe uses the heat from the flame to send a signal to the controller. This signal tells the controller that the flame is lit. The sparking probe may need to be adjusted closer to the burner tip. Make sure there is no debris on the sparking probes.

Important Installation note:

If you are using an automated lighting control system, EIS systems must be connected to a dedicated circuit.